Julian

Sales and Service Information
Julian

Software 3.02 increases Julian's Functionality

Even a successful product like Julian —in the meantime there are over 6000 installations in more than 80 countries all over the world— has to be adapted to the ever-changing market situations once in awhile. This sort of thing usually has more to do with "minor functionality" than with "great" innovation invaluable for increasing the efficiency of anaesthetic machines in day-to-day clinical use. With this in mind, we integrated a large amount of your feedback and many of your suggestions into the latest software version which, it goes without saying, may be downloaded onto all installed devices without any modification to hardware.

At this time we would like to thank all those who helped make this software version possible, especially those who provided the necessary translations in over 17 languages allowing a Julian equipped with software version 3.02 to "speak". This is a commendable achievement, unique to an anaesthetic workstation. On the other hand, this achievement was also made possible by the innovative development tools of our software experts.

What's new?

• Measuring Anaesthetic Gas Mixtures
The growing use of various anaesthetic agents for the induction phase and during OR means that volatile gas mixtures are becoming more and more common. This situation triggers, among other things, mixed gas messages in the current software version which may remain on the display screen an "infinitely" long time if the fresh-gas flow is low. The new software version allows measured values for both anaesthetic agents to be displayed if a mixture of two anaesthetic agents is in the circle system, and of course both agents will be automatically identified.

• MAC Display

The new software version 3.02 allows Julian to take the end-expiratory concentrations of the volatile anaesthetic agents and nitrous oxide to calculate the MAC value. The new algorithm takes into consideration the fact that the effect of an anaesthetic agent depends on the age of the patient. In addition to that, the influence of compressed air is also compensated for: even locations with high elevations will receive the "right" MAC.

• Data Doctor

To ensure your patient's safety, various tests implemented in the software monitor Julian's functions during operation. Generally speaking, this "online" monitoring is a proven thing, so there have been no real changes made in this area.

The advantages of the new Data Doctor become apparent if Julian, equipped with the software version 3.02, identifies an internal error: in the first step, Julian uses the new algorithm to try to repair its own data. During this time, the device continues to operate; the device does not switch to the oxygen emergency delivery mode prematurely or unnecessarily.

This intelligent safety management concept and other improvements to the situation evaluation process significantly increase the availability of the system during emergency situations.

• Optimized Standby

In order to increase the life expectancy of the IRIA gas measuring bench, the motor and infrared projector will be switched off during Standby. When the device is started up from Standby, measured values will be available from the gas measuring bench within at least 30 seconds.

• Alarm Limits in MAN/SPONT

The new software version allows the user to take alarm limits from the automatic ventilation modes (IPPV or PCV). In addition, alarms deactivated in MAN/SPONT may be re-activated by setting an alarm limit. This makes it possible to guarantee complete ventilation monitoring during MAN/SPONT.

• Autoset Ventilation Alarms

The Autoset function for airway pressure and minute volume alarms, which up to now was only available for volume-controlled ventilation, is no longer bound to the **set values** of the ventilator; in software version 3.02 this function is now bound to **measured values**. This feature ensures that alarm limits may be set according to the patient in PCV too.

• I:E-Ratio

The I:E ratio may now be set within a range of 2:1 to 1:2 using increments of 0.1 to facilitate ventilation for patients with pulmonary problems, allowing a more adequate choice of ventilation pattern.

• Virtual Flowmeters

In order to provide a quick overview of the amount of fresh gas **delivered** and its composition, a new combination module has been added which allows virtual flowmeters to be configured together with the volumeter or the pressure indicator as a curve on the standard screen.

• Displaying Vt on the Standard Screen

The tidal volume display, a parameter often used during PCV, has been missed on Julian's standard screen which has caused users to configure the volumeter module in such a way as to display tidal volume as a curve. In order to prevent this display field from having to be occupied by the volumeter in PCV, either minute volume or tidal volume may be displayed on the standard screen. It goes without saying that the alarm remains fixed to the minute volume parameter.

• CO_2

The use of the disposable absorber with an integrated by-pass has made it necessary to have more flexible alarms for the $FiCO_2$ parameter which is basically used to monitor the soda lime. Since rebreathing with an open disposable absorber creates an inspiratory CO_2 increase and since this is necessary for the waking up phase, unnecessary alarms are especially common to this application. The alarm limit for $FiCO_2$ can be set within a range of 1-10 mmHg; it is no longer fixed at 5 mmHg. And of course the alarm can be completely deactivated in MAN/SPONT!
In addition, the CO_2 curve may be scaled at a range of 0-110 mmHg.

• Changing Modes

In previous software versions, high fresh-gas settings had to be confirmed two times before changing from MAN/SPONT to an automatic ventilation mode since fresh-gas flows could have been automatically reduced in this situation. This usually lead to incorrect actions on the part of the user because he or she was not used to having to confirm the same thing twice. Thus, changing from one mode to another was not usually confirmed in practical application.
In order to increase operational safety, the new software version does not require double confirmations, it immediately changes to the new ventilation mode. To make the change visible, all set parameters are displayed on a lighter background after a ventilation mode has been chosen. A ventilation mode which has not been confirmed will be acoustically signaled before the "time out".

• New Text

In order to clarify the status of the device (e.g. the monitoring mode, internal errors, etc.), screen messages have been improved. This is the result of hands-on testing done by practicing anaesthesiologists in our lab.

• Languages

There are four new languages included in this software package: Catalan, Greek, Turkish and Hungarian. With a total of 17 languages, Julian continues to contest its proven international acceptance; surely a unique position for an anaesthetic machine. This feat emphasizes the international acceptance of this device.

• Value Pack

Since past response was so positive, we are again offering a "value pack" for Julian's software version 3.02. The value pack includes a leather writing case, the new Pediatric Anesthesia Primer, brochures and information on Julian, the new CD ROM "All about Julian" and various other detailed supplements. We have also decided to offer the value pack at a special price.

Please note that the value pack is only part of the complete package (i.e. software version 3.02 and the hardware upgrade for lack of fresh gas identification).

How do I order this package?

The following combinations are available for your Julian anaesthetic workstation:

		new device	upgrade
software version 3.n	item no.	x	8601927
	list price	-	**200.- DM**
complete package*	item no.	-	8601935
	list price	-	**550.- DM**
hardware for lack of fresh gas**	item no.	**8601695**	8601694
	list price	**441.- DM**	**441.- DM**
value pack SW 3.n Julian	item no.	-	8601993
	list price	-	**200.- DM**

Legend:
*   software version 3.02 including hardware for lack of fresh gas identification and the "value pack"
**   upgrade only possible for software versions 2.02 or later
x   to be serially produced in August 2000
-     not intended

For your information

part	language	order number
News letter SW 3.n	English	90 48 938
Neuheitenblatt SW 3.n	German	90 48 861
Instructions for Use 3.n	German	90 37 063
Instructions for Use 3.n	English	90 37 064
Instructions for Use 3.n	French	90 37 065
Instructions for Use 3.n	Spanish	90 37 066
Instructions for Use 3.n	Italian	90 37 067
Instructions for Use 3.n	Dutch	90 37 068
Instructions for Use 3.n	US english	90 37 181

An Important Message!

At this time, we are working together with all regional representatives to organize a complete upgrade to software 3.02 of all devices located in the various regions. Please inform yourself about the current status within your region in order to prevent the software upgrade package from being ordered multiple times.
At this time (as of the 7th of August) we have an agreement with the region CSAI.

We are sure that these new features will take Julian another important step towards "user-friendliness".

We are looking forward to your response.

Sincerely,

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